IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

APPLICANTS	:	SCHÖNROCK et al.
SERIAL NO.	:	**09/132,799**
FILED	:	13 August 1998
FOR	:	COSMETIC OR DERMATOLOGICAL PREPARATIONS COMPRISING OLIGOPEPTIDES FOR LIGHTENING THE SKIN OF AGE MARKS AND/OR PREVENTING TANNING OF THE SKIN, IN PARTICULAR TANNING OF THE SKIN BY UV RADIATION
ART UNIT	:	**1654**
EXAMINER	:	**Michael Borin**

6 May 2003

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' BRIEF ON APPEAL PURSUANT TO 37 CFR § 1.192

SIR:

This is an appeal from the final rejection dated 8 October 2002.

(1) REAL PARTY IN INTEREST

The real party in interest is **Beiersdorf AG** by virtue of an assignment recorded on at Reel 9552, Frame 0283 (Recorded on 19 October 1998).

(2) RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

(3) STATUS OF CLAIMS

Claims 6 and 11-26 are pending in the application. Claims 13, 21 and 23-26 have been withdrawn from consideration. Claims 6, 11, 12, 14-20 and 22 are subject to final rejection.

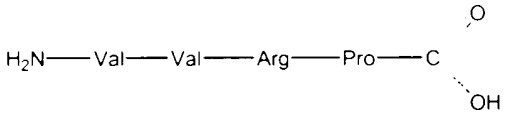
(4) STATUS OF AMENDMENTS

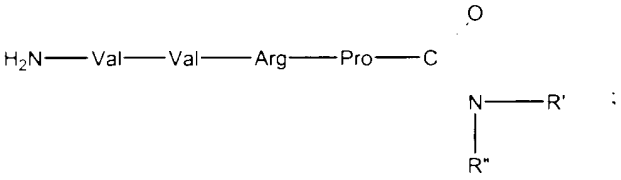
It is believed that all amendments have been entered (no amendment was submitted after the final rejection of 8 October 2002).

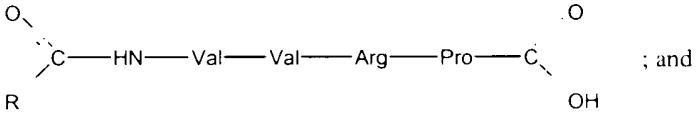
NOTE: A petition against the finality of the restriction/election of species requirement was filed on 13 January 2003 which was denied in the petition decision of 19 March 2003. A petition for reconsideration of the petition decision was filed on 6 May 2003. Should the restriction/election of species be rescinded, claim 21 would also be considered to be pending in the application.

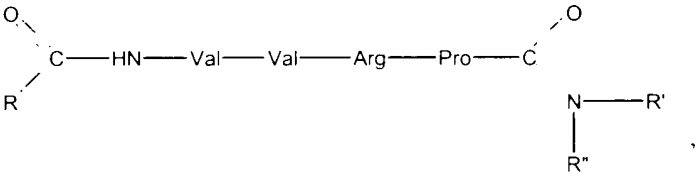
(5) SUMMARY OF INVENTION

The present invention relates to a cosmetic or dermatological topical water-in-oil preparation for cosmetic and topical dermatological lightening of the skin or preventing tanning of the skin caused by UV radiation which comprises of one or more monomeric oligopeptides selected from the group consisting of:

(a) 

(b) 

(c)  ; and

(d) 

wherein:

R represents a branched or unbranched, saturated or unsaturated alkyl radical having C_1-C_{30} carbon atoms,

R' and R" independently of one another may be selected from the group consisting of hydrogen and branched or unbranched, saturated of unsaturated alkyl radical having C_1-C_{30} carbon atoms,

one or more cosmetically or dermatologically acceptable active ingredients, auxiliaries and/or additives; and

a cosmetically or dermatologically acceptable carrier.

This invention is supported, for example, by original claim 2 and pages 6-9 of the specification. Claims 6, 11, 12, 15-20 and 22 represent further limitations of this invention.

(6) ISSUES

The issues to be decided are whether:

1. Claims 14 and 15 are obvious or unobvious over Kohmura et al. (*Agric. Biol. Chem.*, 54: 835-836, (1990)) and Stein (U.S. Patent 5,346,887) in view of Goodman & Gilman's "The Pharmacological Basis of Therapeutics (Ninth Edition, page 745) and further in view of Greene et al. (U.S. Patent 5,753,226);

2. Claims 14 and 15 are obvious or unobvious over Kohmura et al. (*Agric. Biol. Chem.*, 54: 835-836, (1990)) and Stein (U.S. Patent 5,346,887) in view of Goodman & Gilman's "The Pharmacological Basis of Therapeutics (Ninth Edition, page 745) and further in view of Cho et al. (U.S. Patent 5,665,700);

3. Claims 14-20 and 22 are obvious or unobvious over Kohmura et al. (*Agric. Biol. Chem.*, 54: 835-836, (1990)) in view of Bundgaard (*Design of Prodrugs*, Chapter 1, 1985) and Sumner-Smith (U.S. Patent 5,646,120); and

4. Claims 14, 6, 11 and 12 are obvious or unobvious over Kohmura et al. (*Agric. Biol. Chem.*, 54: 835-836, (1990)) in view of Stein (U.S. Patent 5,346,887), Goodman & Gilman's "The Pharmacological Basis of Therapeutics (Ninth Edition, page 745), Bundgaard (*Design of Prodrugs*, Chapter 1, 1985) and Sumner-Smith (U.S. Patent 5,646,120).

(All references hereafter cited by single name)

(7) GROUPING OF CLAIMS

It is believed that should any of the rejections of claim 14 be reversed, the rejection of all of claims 6, 11, 12, 14-20 and 22 would be reversed. Based on the references cited, claims 14 and 15 could be considered to stand or fall together. However, claims 6, 11, 12 (specific dosage amounts) and claims 16-20 and 22 (specific tetrapeptides) should also be considered on their

separate merits.

(8) ARGUMENT

Summary of Arguments

The appellants composition claims are unobvious over any permutation of the secondary references when combined with Kohmura.

Secondarily, the primary reference (Kohmura) only describes the tetrapeptide VVRP like that of (a) in claim 14. There is no teaching or suggestion of the modified tetrapeptide VVRP like that of (b)-(d) in claim 14 which serves as the basis for dependent claims 16-20 and 22.

Underlying Issues to Be Decided

Before addressing the individually rejections in greater detail, it is believed that it would be helpful to frame the issues which form the basis for the positions held by the appellants and are believed to form the positions of the examiner.

The issues to be decided when determining whether the claims are obvious or unobvious over the prior art are:

(1) If a compound is known, can a composition based on that compound be held to be allowable?

(2) What weight, if any, should be accorded to the preamble of a claim?

The appellants believe an adequate representation of the examiner's position on these issues can be found, e.g., on page 7, lines 3-15 of the examiner's final rejection:

> "It would be *prima facie* obvious to one skilled in the art to be motivated to prepare pharmaceutical compositions from peptides of Komura (sic) because they have a desirable pharmaceutical properties of ACE inhibitors. Selection of a particular physical form of delivery would be within the perview (sic) of a person skilled in [the] art. For example, an artisan would be motivated to use water-in-oil formulation which has proven to be effective for oral administration of various

types of polypeptides, as illustrated in U.S. 5,665,700.

> In regard to intended use recited in the preamble of claim 1 [now 14], arguments related to the intended use of the composition are of little relevance in determining the patentability of the composition. A mere statement of purpose or intended use in the preamble of a claim need not be considered in finding anticipation[1] Diversitech Corp. V. Century Steps, Inc. 7USPQ2d 1315 (Fed. Cir. 1988); In re Stencel, 4 USPQ2d 1071 (Fed. Cir. 1987)."

The appellants believe that since the ultimate determination whether an invention would have been obvious under 35 U.S.C. § 103 is a legal conclusion based on underlying findings of fact (see *In re Kotzab*, 217 F.3d 1365, 1369, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000), one of ordinary skill in the art cannot presume that a compound renders a composition containing that compound to be obvious or that the preamble does not breathe life and meaning into a composition claim until the facts of the case have been considered.

Compositions Containing Known Compounds

Some case law which provides guidance in this area include:

(a) *In re Rosicky*, 276 F.2d 656, 125 USPQ 341 (CCPA 1970) and *In re Lerner*, F.2d 1008, 169 USPQ 51 (CCPA 1971) - Claiming an otherwise patentably compound in combination with a carrier does not render the combination patentable ***if the prior art suggested utilizing the carrier with the compound***.

(b) *In re Wiggins*, 397 F.2d 356, 158 USPQ 199 (CCPA 1968) - A pharmaceutical compound for analgesic use containing an old compound, a pharmaceutical diluent, and a prescribed dosage form and amount was found to be unobvious over prior art describing the identical compound for use in protecting mice against the effects of x-ray radiation.

Weight Accorded the Preamble

MPEP 2111.02 (Weight of Preamble) recites that (bold and italics added by writer):

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[1] It is reminded that all of the rejections under Appeal are based on obviousness not anticipation. Moreover, *Diversitech* also teaches that "Where preamble is essential to point out the claimed invention and give meaning and vitality to the claim, it is given the effect of a limitiaton."

"[A] claim preamble has the import that the claim as a whole suggests for it." *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615, 620, 34 USPQ2d 1816, 1820 (Fed. Cir. 1995). "***If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is 'necessary to give life, meaning, and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim***." *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999). See also *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).....

PREAMBLE STATEMENTS RECITING PURPOSE OR INTENDED USE

The claim preamble must be read in the context of the entire claim. The determination of whether preamble recitations are structural limitations or mere statements of purpose or use "***can be resolved only on review of the entirety of the [record]*** to gain an understanding of what the inventors actually invented and intended to encompass by the claim." *Corning Glass Works*, 868 F.2d at 1257, 9 USPQ2d at 1966. If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997)."

In addition, quoting from Chemical Patent Practice (1994) by John L. White:

"There is no general rule as to the weight given preambles as positive limitations affecting the patentability of the claimed subject matter. *In re Neugebauer et al.*, 330 F.2d 353, 141 USPQ 205 (CCPA 1964). ***Its significance is determined on the basis of the facts in each case.*** *In re Duva*, 387 F.2d 402, 156 USPQ 90 (CCPA 1967)...Where the language of a composition claim is otherwise so broad as to read on inoperable formulations, a preamble which recites the desired property (abrasive article) can have the effect of limiting the scope of the claim to the operative formulations. *Kropa v. Robie et al.*, 187 F.2d 150, 88 USPQ 478 (CCPA 1951)."

Statement of the Facts (Kohmura reference)

The Kohmura reference serves as the primary reference for each of the four rejections made under 103(a). The appellants concede that the Kohmura teaches the tetrapeptide VVRP which is identical to structure (a) of claim 14 - see Table 1, No. 6 of the Kohmura reference. (However, the modified VVRP like that of (b)-(d) in claim 14 are not disclosed by Kohmura.)

Kohmura also disclose other peptide sequences which differ from the tetrapeptide VVRP by chain

length or by type of amino acids used. Each of the VRP-containing peptides, including VVRP, were assayed for angiotensin-converting enzyme (ACE) activity (ACE inhibitors compounds are commonly used in anti-hypertension and blood pressure control compositions - some brand name examples include Vasotec and Prinivil).

Even within the context of ACE activity, VVRP is not a favored compound as indicated in col. 5, last 5 lines through page 836, col. 1, line 1 - "Elongation of the peptide chain of Val-Arg-Pro [VRP] one by one towards its N-terminus gave compounds **6-11**; ***as the size of the peptide increased, the potency decreased***, but further elongation of the peptide chain restored the potency and finally resulted in the comparatively potent compound **11** (57-65)." Of the compounds tested in this sequence, i.e. compounds 5-11 from Table 1 of Kohmura, VVRP represented the compound with the least amount of potency as an ACE-inhibitor.

It is also instructive to note that the final sentence of the Kohmura reference reads - "Further work, however, will be needed to conclude whether these active peptides have a physiological meaning in blood pressure regulation."

1. Kohmura and Stein in view of Goodman & Gilman's and Greene (claims 14 and 15)

Kohmura

Kohmura is relied upon for their teaching of the VVRP tetrapeptide and their use as a potential pharmaceutical agent, i.e. as an ACE-inhibitor. The only difference ascribed between the Kohmura reference and the appellants' invention is that Kohmura "does not teach administration of the referenced peptide in a form of pharmaceutical composition."

The appellants' respectfully disagree with this characterization of differences between the teachings of Kohmura and the appellants' claimed invention.

The appellants' claimed composition differ from the teachings of Kohmura in additional ways:

(a) They are directed toward cosmetic and dermatological compositions not pharmaceutical compositions;

(b) Not only do the appellants' claim a composition, but also a specific type of composition, i.e. a "topical water-in-oil-preparation";

(c) The cosmetic or dermatological composition also contains cosmetically or dermatologically acceptable active ingredients, auxiliaries and/or additives and a cosmetic or dermatologically acceptable carrier; and

(d) The specific preparation is also to said to have a specific property associated with it. i.e. "dermatological lightening of the skin or preventing tanning of the skin caused by UV radiation.

As recited in *Kropa v. Robie et al.*, supra, failure to include the intended use of the composition could've rendered the appellants' claim so broad as to read upon inoperable elements. As such, this preamble limitation alone would breath life and meaning into the claim. However, when considering the entirety of the preamble, it is evident that the serves not only to distinguish between compound and composition but among different types of compositions.

Stein and Goodman & Gilman

While it is certainly permissible to use secondary references and possibly combine or substitute their teachings with that of the primary reference, use of a secondary reference does not absolve the examiner from adhering to the "as a whole"-standard for considering the reference, especially with regard to disclosures which teach away from the appellants' invention.

Stein is referred to by the examiners as teaching "...topical compositions comprising ACE inhibitors. Said compositions are used to treat glaucoma. It would have been obvious to one skilled in the art at the time the invention was made to be motivated to prepare a topical pharmaceutical composition comprising peptides of Kohmura as an active ingredient, because Kohmura teaches that these peptides inhibit ACE activity and

as such they can be used in topical pharmaceutical compositions of Stein." (see page 4, lines 4-10 of examiner's final rejection)

However, these descriptions represent a mischaracterization of the teachings of Stein.

First, it should be pointed out that Stein refers to topical ***ocular*** compositions (see e.g. claim 6) which is not surprising for a composition directed toward treatment of glaucoma.

Second, the ACE-inhibitors of disclosed in Stein (e.g. captopril and enalapril) are not tetrapeptide sequences as in the appellants' claimed invention. It is noted that prosecution of this application also included a restriction and election of species requirement whereby the examiner established the patentable distinction between mono-, di-, tri- and tetra-peptides (homo- or hetero-peptides). The examiner cannot now argue that these same sequences are obvious over one another (captopril and enalapril are based on tripeptide sequences)

Third, the examiner's description of Stein would lead the reader to believe that the ACE-inhibitors were the primary ingredient of their topical ocular composition just as the VVRP tetrapeptides are the primary compounds of the appellants' composition. Rather, Stein teaches compositions and method of treating glaucoma which comprise of a therapeutically effective amount of a renin-inhibiting compound in combination with a therapeutically effective amount of a steroidal anti-inflammatory agent. It is only within the context that other ingredients could be added that ACE-inhibitors are part of the topical ocular composition.

Fourth, related to the third point above, one cannot separate the use of ACE-inhibitors in composition form from the renin-inhibiting compound in combination with a steroid anti-inflammatory agent. It has previously been held that *"[i]t is impermissible* within the framework of section 103 *to pick and choose* from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." (see *In re Wesslau*, 353 F.2d 238, 241, 147 USPQ 391, 393 (CCPA 1965)) and that "...'*Determination of obviousness cannot be based on the hindsight combination of*

components selectively culled from the prior art to fit the parameters of the patented invention.' see *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546, 48 USPQ2d 1321, 1329 (Fed. Cir. 1998). Stein acknowledges that ACE-inhibitors have some undesirable side effects and suggests combination with a renin inhibitor to address this problem which inextricably links these two elements of Stein's invention (see col. 22, lines 21-29).

Goodman & Gilmans' is relied upon for the quote from page 745 that "there is no compelling reason to favor one ACE-inhibitor over another, since all ACE-inhibitors have...similar therapeutic indications, adverse affect profiles and contraindications." However, this selective reading also does not comply with the "as a whole"-standard for consideration. This reference was first introduced as Exhibit 1 with the appellants' response of 26 August 2001 and was relied upon by the appellants' for the teaching that ACE-inhibitors occasionally cause a maculopapular rash that may or may not itch (see page 751, paragraph entitled "Skin Rash", i.e. this represents a teaching away from the use of an ACE-inhibitor in a ***dermatological*** composition.

Within the purview of one skilled in the art is not the proper standard to establish a prima facie case of obviousness

With regard to the physical form of the preparation (i.e. a topical water-in-oil preparation), the examiner states that "...selection of a particular physical form of preparation is within the perview (sic) of one skilled in the art. For example, Greene et al. (U.S. Patent 5,753,226) describes peptide formulations for topical treatment of ocular and skin sites." (see page 4, lines 16-18 of examiner's final rejection).

However, MPEP 2143.01 states that "A statement that modifications of the prior art to meet the claimed invention would have been 'well within the ordinary skill of the art at the time the claimed invention was made' because the references relied upon teach that all aspects of the claimed invention were known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (BPAI 1993)."

No motivation to combine the references as asserted by the examiner

In addition to the lack of motivation for obtaining a particular physical form as described above, the motivation for combining the teachings of Stein and Goodman & Gliman's appear to come from hindsight reconstruction by the examiner and not from any explicit or implicit suggestion from the prior art.

The Kohmura reference is not suggestive of a composition much less a cosmetic or dermatological topical water-in-oil composition. As mentioned above in the Statement of Facts (Kohmura), if motivation is based on the teaching in Kohmura for ACE-inhibitor activity for the forming a composition with VVRP, it is again reminded that VVRP was the least attractive of the VRP-peptides which would teach against their further use and that Kohmura themselves acknowledged that further studies would have to be undertaken before their use as blood pressure regulators could be determined.

Both Stein and Goodman & Gilman lack any suggestion or direction that the selective teachings relied upon by the examiner could be substituted into the teachings of Kohmura and that one would be directed to make this substitution. MPEP 2143 states that "The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)"

MPEP 2143.01 establishes that "The mere fact that references *can be combined* or modified *does not render the resultant combination obvious unless* the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)". Given the teachings of Stein and Goodman & Gilman, reasonable doubts exist as to whether the references could be combined with Kohmura.

For all of the above reasons, the appellants' claimed composition is not suggested by the compound of Kohmura when viewing Kohmura and the secondary references as a whole and as such an *In re Rosicky*, supra or *In re Lerner*, supra, type situation does not exist here.

Even if all of these references were combined as indicated by the examiner, this still would leave one of ordinary skill in the art with a pharmaceutical composition not a

cosmetic or dermatological topical water-in-oil composition for lightening of the skin or preventing tanning of the skin caused by UV radiation. This would be problematic for maintaining the rejection on a couple of levels.

First, it would be presumed through inherency that the pharmaceutical composition formed would also be a topical cosmetic or dermatological composition and that in the process of forming the pharmaceutical composition, the activity of lightening the skin or preventing tanning would be retained. However, no evidence has been presented in establishing inherency for this point.

MPEP 2112 (Requirements of Rejection Based on Inherency; Burden of Proof) states "*The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).....To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.*'" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999), see also *Mentor H/S, Inc. v. Medical Device Alliance, Inc. (Mentor II)*, 244 F.3d 1365, 58 USPQ2d 1321 (Fed. Cir. 2001) and *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981).

Second, even if inherency was shown, there is still no teaching or direction which would lead one to pick a water-in-oil form for the composition.

2. Kohmura and Stein in view of Goodman & Gilman's and Cho

The reader is referred to the appellants' previous points and arguments made above with respect to the Kohmura, Stein and Goodman & Gliman references.

Within the purview of one skilled in the art is not the proper standard to establish a prima facie case of obviousness

This rejection is similar to 1. above with the only difference being the substitution of Greene with Cho.

With regard to the physical form of the preparation (i.e. a topical water-in-oil preparation), the examiner states that "Selection of a particular physical form of preparation is within the perview (sic) of one skilled in the art. For example, an artisan would be motivated to use water-in-oil formulation which has been proven to be effective for oral administration of various types of polypeptides, as illustrated in US 5,665,700." (see page 7, lines 5-9 of examiner's final rejection).

However, MPEP 2143.01 states that "A statement that modifications of the prior art to meet the claimed invention would have been 'well within the ordinary skill of the art at the time the claimed invention was made' because the references relied upon teach that all aspects of the claimed invention were known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (BPAI 1993)."

Moreover, the peptides referred to in Cho are not directed to tetrapeptide sequences as in the appellants' claimed invention (see e.g. claim 4 - insulin, erythropoietin, porcine somatotropin, human growth hormone or calcitonin). It is noted that prosecution of this application also included a restriction and election of species requirement whereby the examiner established the patentable distinction between mono-, di-, tri- and tetra-peptides (homo- or hetero-peptides). The examiner cannot now argue that these same sequences are obvious over one another.

3. Kohmura in view of Bundgaard and Sumner-Smith (Claims 14-20 and 22)

The reader is referred to the appellants' previous points and arguments made above with respect to the Kohmura reference.

Can be modified is not the proper standard for combining references

Bundgaard and Sumner-Smith establish that terminal amino groups and carboxyl groups of tetrapeptides could be modified. However, what is lacking is a motivation which

arises from the references themselves which suggesting making such a modification to the VVRP tetrapeptide of Kohmura.

MPEP 2143.01 establishes that "The mere fact that references *can be combined* or modified *does not render the resultant combination obvious unless* the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)".

Moreover, even the examiner's hindsight logic for making the modification to the VVRP tetrapeptide of Kohmura is open to question. The examiner stated that "...a prodrug analog having protected N- and/or C-termini with a reasonable expectation that such prodrugs will have at least similar effectiveness in inhibition of angiotension-converting enzyme and regulation of related physiological processes." (see page 9, lines 3-7 of examiner's final rejection)

First, as recited in the Statement of Facts (Kohmura), supra, Kohmura themselves acknowledge the need for further testing to establish a link between their disclosed ACE-inhibition activity and a physiological process such as blood pressure regulation.

Second, the state of the art with regard to the VRP-class of peptides has a certain degree of unpredictability assigned to it. Tri-peptides had the best ACE-inhibition activity of the VRP-class while tetra-peptide and penta-peptide showed the worst ACE-inhibition activity. VRP-class peptides of 6-9 amino acids showed worse activity than tri-peptides but still at least three orders of magnitude better than tetrapeptides (see Table 1 of Kohmura). Therefore, there is no reasonable expectation of success for a holding of maintaining "similar effectiveness".

All claim limitations not taught

MPEP 2143.03 states that "To establish *prima facie* obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art." (see also *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

Even if it were to be upheld that the combination of references teaches the appellants' invention as it relates to claim 14, structures (a) and (b) (and also claims 15, 16 and 19) claims 17, 18, 20 and 22 are directed toward separate subject matter not taught by Kohmura in combination with Bundgaard and Sumner-Smith (structures (c) and (d) lack an amino terminus). There is no reason beyond an "obvious-to-try" rationale which would support the modifications to the VVRP tetrapeptide sequence to arrive at the tetrapeptides of claims 17, 18, 20 and 22.

4. Kohmura in view of Stein, Goodman & Gilman, Bundgaard and Sumner-Smith (Claims 14, 6, 11 and 12)

The reader is referred to the appellants' previous points and arguments made above with respect to the Kohmura, Stein, Goodman & Gilman, Bundgaard and Sumner-Smith references.

It is believed that the appellants previous responses have established that one of ordinary skill in the art would not even arrive at the point where the cosmetic or dermatological topical water-in-oil preparation could be obtained and that all which remained was to arrive at the appellants' specifically claimed dosage ranges. It would also appear that the precedent of *In re Wiggins*, supra, would also apply here.

However, *in arguendo*, even if a composition were somehow established, the examiner is relying upon the premise that the ranges taught by Kohmura fall within the ranges taught by the appellants and that any differences would fall under the purview of optimization the ranges of an art recognized variable.

This should not be persuasive on at least two counts.

First, the examiner's assumptions are based on an *in vitro* formulation for ACE-inhibition with no teaching or suggestion that this is intended for a topical water-in-oil preparation.

Second, while the motivation for any modification of the Kohmura reference, does not have to match that of the appellants' invention, the final composition form must meet

the limitations set forth in the appellants' claims. There is no indication that within the process of modifying the teachings of Kohmura to match the dosage limitations of claims 6, 11 and 12, that one of ordinary skill in the art would simultaneously be able to maintain the limitations set forth in independent claim 14, i.e. cosmetic or dermatological topical water-in-oil preparation for cosmetic and topical dermatological lightening of the skin or preventing tanning of the skin caused by UV radiation.

Both of these propositions appear to have basis in inherency, but no evidentiary support has been provided to establish these claims. MPEP 2112 (Requirements of Rejection Based on Inherency; Burden of Proof) states "*The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).....To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.*'" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999), see also *Mentor H/S, Inc. v. Medical Device Alliance, Inc. (Mentor II)*, 244 F.3d 1365, 58 USPQ2d 1321 (Fed. Cir. 2001) and *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981).

(9) CONCLUSION

For the foregoing reasons, Appellants respectfully request that the Honorable Board reverse the obviousness rejections against claims 6, 11, 12, 14-20 and 22.

CONDITIONAL PETITION FOR EXTENSION OF TIME

If any extension of time for this response is required, Appellants request that this be considered a petition therefor. Please charge the required petition fee to Deposit Account No. 14-1263.

ADDITIONAL FEE

Please charge any insufficiency of fees, or credit any excess to our Deposit Account No. 14-1263.

Respectfully submitted,

NORRIS MCLAUGHLIN & MARCUS, P.A.

By: Howard C. Lee

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Label EV 208798564 US, in an envelope addressed to: Hon. Commissioner of Patents, P.O. Box 1450 Alexandria, VA 22313-1450

Date: **6 May 2003**

By: _____

Vilma I. Fernandez

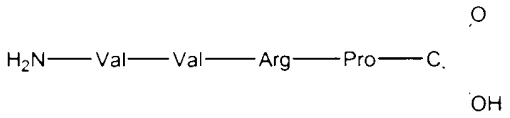
(10) APPENDIX - CLAIMS ON APPEAL

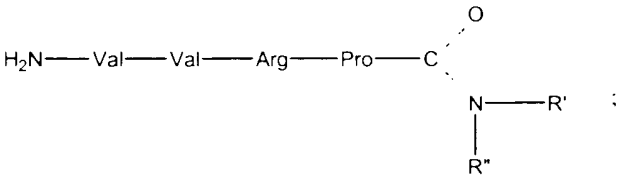
6. The topical water-in-oil preparation of claim 14, wherein the oligopeptides(s) is/are present in cosmetic or dermatological topical preparations in concentration of 0.000001 -10% by weight, based on the total weight of the preparations.

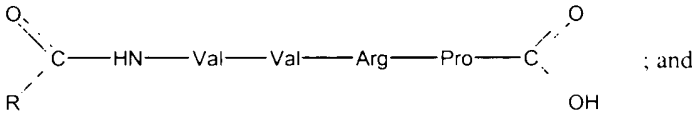
11. The topical water-in-oil preparation of claim 6, wherein the oligopeptides(s) is/are present in the cosmetic or dermatological topical preparations in concentrations of 0.0001 – 1% by weight based on the total weight of the preparations.

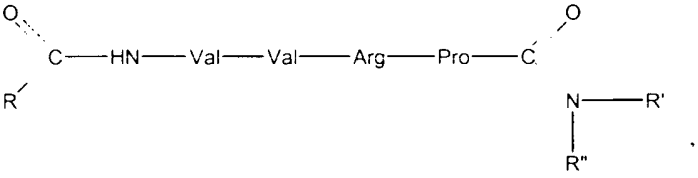
12. The topical water-in-oil preparation of claim 11, wherein the oligopeptides(s) is/are present in the cosmetic or dermatological topical preparations in concentrations of 0.0001 – 0.1% by weight based on the total weight of the preparations.

14. A cosmetic or dermatological topical water-in-oil preparation for cosmetic and topical dermatological lightening of the skin or preventing tanning of the skin caused by UV radiation which comprises of one or more monomeric oligopeptides selected from the group consisting of:

(a) 

(b) 

(c)  ; and

(d) 

wherein:

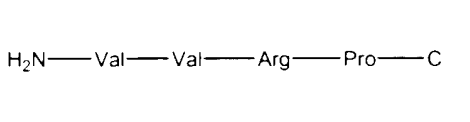
R represents a branched or unbranched, saturated or unsaturated alkyl radical having C_1-C_{30} carbon atoms,

R' and R" independently of one another may be selected from the group consisting of hydrogen and branched or unbranched, saturated of unsaturated alkyl radical having C_1-C_{30} carbon atoms,

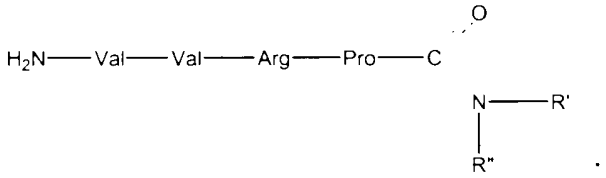
one or more cosmetically or dermatologically acceptable active ingredients, auxiliaries and/or additives; and

a cosmetically or dermatologically acceptable carrier.

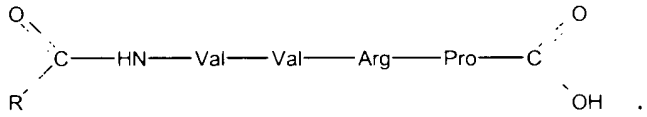
15. The cosmetic or dermatological topical water-in-oil preparation of claim 14 wherein the oligopeptide is

(a) 

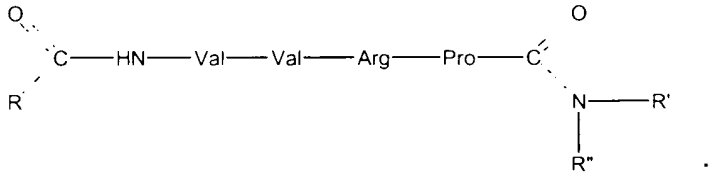
16. The cosmetic or dermatological topical water-in-oil preparation of claim 14 wherein the oligopeptide is

(b) 

17. The cosmetic or dermatological topical water-in-oil preparation of claim 14 wherein the oligopeptide is

(c) 

18. The cosmetic or dermatological topical water-in-oil preparation of claim 14 wherein the oligopeptide is

(d) 

19. The cosmetic or dermatological topical water-in-oil preparation of claim 16 wherein R' and R" is hydrogen.

20. The cosmetic or dermatological topical water-in-oil preparation of claim 17 wherein R is methyl.

21. The cosmetic or dermatological topical water-in-oil preparation of claim 17 wherein R is an n-C_{15} or n-C_{17} alkyl radical.

22. The cosmetic of dermatological topical water-in-oil preparation of claim 18 wherein R is methyl, R' is hydrogen and R" is hydrogen.